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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/724,599 | 12/02/2003 | Stephen Bailey | 117873 | 2608 |
| 25944 | 7590 | 12/01/2005 | EXAMINER | |
| OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | EVANS, GEOFFREY S | |
| | | ART UNIT | PAPER NUMBER | |
| | | 1725 | | |

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/724,599 | BAILEY ET AL. | |
| | Examiner Geoffrey S. Evans | Art Unit 1725 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 November 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3,6-8,11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2,6,11 and 12 is/are rejected.
- 7) Claim(s) 3,7 and 8 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

1. The final rejection of 23 August 2005 is withdrawn in view of the arguments presented on 8 November 2005, which overcome the rejection of claims 11 and 12 under 35 U.S.C. 112, first paragraph.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanishiki et al. in U.S. Patent No. 6,180,908 B1. Tanishiki et al. discloses apparatus and method of electric discharge machining a passage through a work piece (element 5) using a hollow electrode (element 10) wherein a discrete backing member (element 14) is positioned abutting a face of the work piece through which the electrode exits so that at a breakthrough of said electrode through said workpiece the path of flushing agent is not disrupted (see column 5, line 63 to column 6, line 21). In column 6, lines 10-11 the language "Since the jig 14 is attached to the bottom of the workpiece 5" shows that the discrete backing member abuts the workpiece.

4. Claims 1,6 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue in U.S. Patent No. 4,393,292. Inoue discloses method and apparatus for machining a passage through a workpiece (see column 1, lines 18-19 "throughgoing-opening") using a hollow electro discharge machining electrode and a corresponding flushing agent

supplied via the hollow electrode (see column 4,lines 58-60) wherein a discrete backing member (worktable, element 10; see column 4,lines 67-68 and figure 1) is positioned abutting a face of the workpiece.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanishiki et al. in U.S. Patent No. 6,180,908 B1 in view of Tanaka in U.S. Patent No. 5,004,530. Tanaka teaches a liquid tight contact between the workpiece and the backing member in column 2,lines 39-42. It would have been obvious to adapt Tanishiki et al. in view of Tanaka to provide this to maintain the fluid pressure during machining.

7. Claims 11,12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue in U.S. Patent No. 4,393,292 in view of Briffod in U.S. Patent No. 4,134,807. Briffod teaches a backing member (worktable including a slide element 13) that abuts the entire breakthrough region. It would have been obvious to adapt Inoue in view of Briffod to provide this to support the workpiece.

8. Claims 1,6,11,12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Briffod in U.S. Patent No. 4,134,807 in view of Inoue in U.S. Patent No. 4,393,292. Briffod has an apparatus for performing discharge machining with the slide (element 13) of a table abutting a face of the workpiece. Briffod does not disclose machining a passageway through a workpiece. Inoue teaches machining a passageway through a

workpiece supported by a flat worktable (see column 1, lines 18-19 and figure 1). It would have been obvious to adapt Briffod in view of Inoue to provide this to electro discharge machine a passage through the workpiece.

9. Applicant's arguments filed 10 June 2005 have been fully considered but they are not persuasive. Regarding the Tanishiki et al. (U.S. Patent No. 6,180,905) reference, the path of the fluid is no more disrupted than the recess created by the mechanical force of the electrode and disclosed in figure 4 of the instant application.

10. Claims 3,7, and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blick et al. in U.S. Patent No. 5,738,777 has a backing auxillary layer 4 for an electrochemical machining apparatus. Andrews in U.S. Patent No. 3,314,875 has a backing element 33 that is crosshatched with electric insulating material. Clifford in U.S. Patent No. 3,372,099 has a backing member (element 12)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey S Evans whose telephone number is (571)-272-1174. The examiner can normally be reached on Mon-Fri 6:30AM to 4:00 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571)-272-1171. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

GSE


Geoffrey S. Evans
Primary Examiner
Group 1700